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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,317	01/16/2002	Hieronymus Andriessen	27500-72	6212

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EXAMINER
KOSLOW, CAROL M

ART UNIT	PAPER NUMBER
1755	

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/050,317	ANDRIESSEN, HIERONYMUS	
	Examiner	Art Unit	
	C. Melissa Koslow	1755	

-- The MAILING DATE of this communication appears on the cover sh t with th correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-3,5,6,8 and 10-13* is/are allowed.

6)☒ Claim(s) *4,7,9 and 14-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

The information disclosure statement filed 16 January 2002 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the patent publication number and date for the Japanese application is not given and for the article, the title, the authors, source of the articles and the publication date of the article is not given. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claims 4, 7, 9 and 14-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4, 9, 14 and 15 are indefinite since claim 1 teaches the copper ions are part of a complex, but these claims teach the copper ions are part of copper chlorine. It is unclear how the copper ions can be part of both, especially since the copper is monovalent. It is noted that page 5

of the specification teaches the complex is formed by combining a solution containing copper chloride and a citrate or EDTA salt. Claims 7, 16-19, 21-24 and 26-28 are all duplicates of each other. The process limitations of claims 2-5, 8-10, 12 and 14 do not affect the produced ZnS:Cu. This means the ZnS:Cu produced by the processes of claims 2-5, 8-10 and 14 is identical to that produced in claim 1. Claims 20, 25 and 29 are all duplicates of each other. The process limitations of claims 11 and 15 do not affect the produced ZnS:Cu. This means the ZnS:Cu produced by the processes of claims 11 and 15 is identical to that produced in claim 6.

Claims 7 and 16-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5-7 and 13 of copending Application No. 10/54,243 or U.S. Patent Application Publication 2002/151094. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed process and thin film inorganic light emitting diode device suggest the diode claimed in the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 7 and 16-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 7, 8 and 14 of copending Application No. 10/50,667 or U.S. Patent Application Publication 2002/153830. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed process and thin film inorganic light emitting diode device suggest the diode claimed in the present application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The claims of both of these application teach a thin film inorganic light emitting diode device comprising a ZnS:Cu phosphor particles produced by coprecipitation and were washed by a diafiltration and/or ultrafiltration step, where a agglomeration preventing compound could be present during washing. The taught ZnS:Cu particles in the claims of these applications appear to be identical to those claimed in this application. The references suggest the claimed devices.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7 and 16-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Grey et al in view of Fischer.

Grey et al teach ZnS:Cu particles produced by co-precipitation and which can be coated by an anti-agglomeration compound. These particles are used in electroluminescent displays. Fischer shows these displays have the same structure as the claimed thin film inorganic light emitting diode devices. Thus the references suggest thin film inorganic light emitting diode devices comprising a coated layer comprising ZnS:Cu particles produced by co-precipitation and which can be coated by an anti-agglomeration compound. The particles of Grey et al appear to be identical to the ZnS:Cu particles of claims 7 and 16-29, which are product-by-process claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on

its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The references suggest the claimed devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (703) 308-3817. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (703) 308-3823.

The fax number for Amendments filed under 37 CFR 1.116 or After Final communications is (703) 872-9311. The fax number for all other official communications is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661 or (703) 308-0662.

cmk
May 12, 2003

C. Melissa Koslow
Primary Examiner
Tech. Center 1700